



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,564

05/07/2007

Dirk Salmon

H0075.70115US00

8565

23628 7590 09/29/2010
WOLF GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER

COOLMAN, VAUGHN

ART UNIT

PAPER NUMBER

3618

MAIL DATE

DELIVERY MODE

09/29/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,564	Applicant(s) SALMON, DIRK	
	Examiner VAUGHN T. COOLMAN	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/21/2010 has been entered.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “docking rail” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

Art Unit: 3618

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 8, and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "an accumulator arrangement" in lines 2-3. The antecedent basis for this limitation was provided via applicant's amendment to claim 1 submitted 09/21/2010. Examiner respectfully suggests that in light of the amendment to claim 1, the previously presented claim 3 contained proper and definite claim language.

All remaining claims listed above are rejected as depending from a rejected base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 3618

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al (U.S. Patent No. 5,746,282) in view of Kozlowski (U.S. Patent No. 6,218,796 B1), Losego (U.S. Patent No. 5,064,012), and Van Horn (U.S. Patent No. 5,773,954).

[claim 1] Fujiwara discloses a cart (10) including:

a base (1);

at least three wheels (2, 3) mounted to the base;

a structure (FIG 48), arranged over the base, capable of receiving cleaning utensils;

a handle (4); and

at least one electric motor (6a, 6b) functionally linked to a transmission (“associated gear train” not shown) and acting upon at least one of the wheels, the motor being arranged on the underside of the base.

Fujiwara discloses all of the elements of the claimed invention as described above except for explicitly disclosing an accumulator. Kozlowski teaches an accumulator (battery 54) arranged on the same side of the base as the wheels (44) of the cart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus shown by Fujiwara with the accumulator of Kozlowski as a power source for the electric motors of Fujiwara (needed for operation).

Fujiwara fails to disclose a docking rail arranged in the marginal region of the base and connectable to a charging rail for charging the accumulator. Losego teaches a cart including an electric motor (52) acting upon at least one of the wheels (18) of the cart (10) and including an accumulator (62) equipped with a docking rail (72) arranged in the marginal region of the base

Art Unit: 3618

(12) and being constructed for charging the accumulator (column 2, lines 66-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cart of Fujiwara with the docking rail of Losego in order to provide a convenient and automatic means to charge the battery.

Fujiwara also fails to disclose a charging rail for charging the accumulator. Van Horn teaches a cart including a docking rail (2050) and a charging rail (2110) for charging an accumulator (2070) on the cart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cart of Fujiwara with the charging rail of Van Horn in order to provide a convenient and automatic means to charge the battery as well as secure the cart in one location.

[claim 3] Kozlowski further teaches a control arrangement connected to the at least one electric motor and the accumulator [arrangement] is provided therein, which includes an operating device (56) proximate to the handle (48).

[claim 4] Fujiwara further shows at least three wheels comprises four wheels arranged under the base, with two wheels being fixed and two wheels being steerable.

[claim 5] Fujiwara further shows the fixed wheels are arranged approximately at a center of the cart in the region of side edges of the base and one movable wheel is arranged centrally in each of a front edge region and a rear edge region of the base when seen in the driving direction.

[claim 6] Fujiwara further shows the at least one electric motor comprises two electric motors, each functionally linked with a fixed wheel via a transmission, and each arranged approximately at the center of the base.

Art Unit: 3618

[**claim 7**] Fujiwara further discloses at least one electric motor, being arranged approximately at a center of the base, and wherein the motor is functionally linked to the fixed wheels via a transmission having a differential.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Kozlowski, Losego, and Van Horn, and further in view of Andes (U.S. Patent No. 6,443,252 B1).

[**claim 8**] Fujiwara in view of Kozlowski, Losego, and Van Horn discloses all of the elements of the claimed invention as described above except for a joystick proximate the hand grip (4). Andes teaches an electric cart (10) including a hand grip (24) and a joystick (34) proximate the hand grip. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus shown by Fujiwara with the joystick and hand grip configuration as taught by Andes in order to provide the advantage of separate controls for manual and powered movement of the cart.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Kozlowski, Losego, and Van Horn, and further in view of Salmon (DE 100 10 852 A1).

[**claim 10**] Fujiwara in view of Kozlowski, Losego, and Van Horn discloses all of the elements of the claimed invention as described above except for a stand for an operator. Salmon teaches a cart including a stand for an operator. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus shown by Fujiwara

Art Unit: 3618

with the operator stand of Salmon in order to provide the advantage of decreased operator fatigue.

[claim 11] Examiner notes that the integration of the stand into the base would have been obvious to one of ordinary skill in the art at the time the invention was made. Integrating the platform would result in a stronger and more durable base for the cart.

[claim 12] Salmon further teaches the stand including a standing platform having wheels (14) and being attachable to a base of the cart.

Response to Arguments

Examiner respectfully disagrees with the arguments presented by Applicant on 09/21/2010. Regarding the description of Losego at the top of page 5, Examiner notes that in column 6, lines 17-20, Losego describes how one cart, alone, is recharged by the apparatus due to the grounding of the battery from the negative terminal 66 to the cart chassis 12. A second, or more than one, cart is not required for the charging apparatus of Losego to be effective. As such, the feed bar does not need to pass from the front to the back of the cart. Indeed, one of ordinary skill in the art at the time the invention was made would recognize the teaching of Losego allows the charging of a solitary cart and that the length or position of the feed bar can be easily adapted to any battery powered cart. The charging rail could be located on the side of the cart, the front, the back, as the only requirement is a connection to both the charging device and ground. As such, the functionality (charging at least one cart) is not compromised. Furthermore, nesting only requires an electrical connection between the “nested” carts. A cart similar to the

Art Unit: 3618

embodiment shown by Fujiwara can indeed be connected to a cart to the front, rear, or both to facilitate charging of each cart.

Regarding the argument about whether “cleaning” carts are nested or not, one of ordinary skill in the art at the time the invention was made would recognize the requirements of the cleaning carts and allow the docking rail to be placed in the appropriate location. Fujiwara clearly states that his cart is “a generally rectangular wheeled platform for the support thereon of a load” and as such lends the design to many embodiments, including a cleaning cart, above the rectangular wheeled platform.

Regarding the allegation of Losego and Fujiwara being nonanalogous art, each is directed to a power-assisted cart including motors, wheels, and cargo-carrying capacity. The fact that each are classified in different subclasses does not ignore the fact that Fujiwara should have been searched in 180/65.1 – electric powered vehicles. An omission of searched fields by an Examiner does not constitute a finding of fact on the analogous nature of the two prior art references.

Regarding the amendment to claim 1, the modification of Fujiwara by the teaching of Losego definitely does not require Losego to be modified as well. Furthermore, Applicants statement that “the feed bar of Losego requires the carts to be nested to function” is totally false as evidenced in the section of Losego referenced above. Finally the feed bar does not necessarily have to be extended beyond the ends of the cart in order to function. One of ordinary skill in the art at the time the invention was made would recognize that the feed bar could be recessed and still contact the charging portion of the charging apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAUGHN T. COOLMAN whose telephone number is (571)272-6014. The examiner can normally be reached on Monday thru Friday, 10am-8pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver can be reached on (571) 272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. ALLEN SHRIVER II/
Supervisory Patent Examiner, Art Unit 3618

VAUGHN T COOLMAN
Examiner
Art Unit 3618

/V. T. C./
Examiner, Art Unit 3618